extrapolated with a monoexponential function to find $C'_{a,ex}(t)$ which is convolved with $\frac{h(t)}{k}$ to find $C_{v,ex}(t)$. Where k is a partial volume averaging (PVA) scaling factor and is determined according to $k = \frac{\int_0^\infty C'_{a,ex}(t)dt}{\int_0^\infty C_{v,ex}(t)dt}$. The measured arterial curve of contrast concentration, $C'_a(t)$, is then corrected for partial volume averaging by dividing with the factor k to arrive at the arterial curve of contrast concentration, $C_a(t)$.

A1 end

Remarks

Please enter the foregoing preliminary amendment prior to examination of the present application. Applicant submits that this amendment does not narrow the scope of the claims and it does not constitute an amendment for any reason related to the statutory requirements for a patent. The above indicated change is submitted to correct a typographical error. No new matter has been added.

Respectfully Submitted,

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PATENT

IN THE UNITED STATES OFFICE OF PATENTS AND TRADEMARKS

Applicant: Ting Y. Lee	:	
	:	
Serial Number: 10/007,341	:	Group Art Unit: 2121
	:	
Filed: October 25, 2001	:	
	:	Examiner:
For: METHOD AND APPARATUS FOR CALCULATING BLOOD FLOW PARAMETERS	: : :	

SUBMISSION OF MARKED UP PARAGRAPHS

Commissioner for Patents
Washington, D.C. 20231

Submitted herewith is a marked up paragraph in accordance with 37 C.F.R. 1.121(b)(1)(iii) wherein additions are underlined and deletions are [bracketed].

Page 7, para. 20:

In one embodiment, the arterial curve of contrast concentration measured by system 10 and NMR system (not shown) is corrected for partial volume averaging as described herein. For example, during a cranial scan, but not limited to cranial scans, arterial regions within the vascular territories of the cerebral arteries (anterior and middle) are identified, and used to generate the measured arterial curve of contrast concentration, $C_a'(t)$. The measured arterial curve of contrast concentration is related to the arterial curve of contrast concentration, $C_a(t)$ by $C_a'(t) = k[*]C_a(t)$, where k is the partial volume averaging scaling factor as explained in greater detail below. A venous region either within the sagittal or tranverse sinuses is located, and $C_v(t)$ is generated where $C_v(t) = C_a(t) * h(t)$ and h(t) is the transit time spectrum of the brain,

as explained herein. $C_a'(t)$ and $C_v(t)$ are deconvolved to find $\frac{h(t)}{k}$. And a trailing slope of $C_a'(t)$ is extrapolated with a monoexponential function to find $C_{a,ex}'(t)$ which is convolved with $\frac{h(t)}{k}$ to find $C_{v,ex}(t)$. Where k is a partial volume averaging (PVA) scaling factor and is determined according to $k = \frac{\int_0^\infty C'_{a,ex}(t)dt}{\int_0^\infty C_{v,ex}(t)dt}$. The measured arterial curve of contrast concentration, $C_a'(t)$, is then corrected for partial volume averaging by dividing with the factor k to arrive at the arterial curve of contrast concentration, $C_a(t)$.

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